



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/763,700

01/23/2004

Leonard Felix

SLA1478

7663

7590  
Gerald W. Maliszewski  
P.O. Box 270829  
San Diego, CA 92198-2829

09/29/2009

EXAMINER

MCLEAN, NEIL R

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

09/29/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/763,700  
Filing Date: January 23, 2004  
Appellant(s): FELIX ET AL.

---

Gerald Maliszewski  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 4/27/2009 appealing from the Office action  
mailed 2/10/2009

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,934,046	Nishikawa et al.	8-2005
4,839,829	Freedman	6-1989

6,502,147

Reilly

2-2004

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-14, and 16-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa et al. (US 6,934,046) hereinafter 'Nishikawa' in view of Freedman (US 4,839,829).

Regarding Claim 1: (Previously Presented)

Nishikawa discloses a method for merging print jobs being sent to a single imaging device (Column 1, lines 9-14), the method comprising:

at a client device (e.g., Host 3000 in Figure 3), despooling a plurality of print jobs being sent to a single imaging device (Despooler 305 in Figure 3; Column 8, lines 40-45), where a print job

is an electronically formatted document in a print data language (The Printer Driver 203 converts the DDI function received from the graphic engine 202 into a control command, for instance a PDL (Page Description Language; Column 7, lines 29-32);

performing a merger performance analysis (The Spool File Manager 304 decides whether or not a printing operation can be performed; Column 8, lines 30-36);

joining the plurality of print jobs into a single joined print job (See System Spooler 204 in Figures 2 and 3; Note: In Figure 3, the Spooled File 303 is Despooled at 305 and after going through the Print Driver 203 is Spooled again by the System Spooler 204 just prior to going to the Printer 1500; The System Spooler 204 as perceived by the Examiner, 'joins print jobs' after being Despooled at 305) and,

rendering the joined print job as a single continuous print job (Graphic Engine 202 performs suitable rendering depending on output destination; Column 9, lines 51-52).

The Examiner's main reference Nishikawa discloses recognizing print settings of a plurality of print jobs, and combining the print jobs together (Column 23, lines 6-10). The Examiner's secondary reference Freedman brings in a method of performance analysis regarding the economic consideration of printing the already joined print job. Freedman evaluates which printing facility and/or particular type of printing equipment is most compatible with the user's specific printing needs such as printing requirements, costs, scheduling etc. (Column 1, lines 10-31).

The Examiner also recognizes that the term 'economic consideration' does not specifically refer singularly to a 'cost saving method' in a dollars and cents fashion, but rather to the feasibility of printing a document/print job given the specific parameters

Art Unit: 2625

that are to be evaluated. It is the combination of these two main features that substantially comprise the Examiner's rejection.

Nishikawa & Freedman are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose evaluating print settings/parameters and determining whether a print job can be processed. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a means for performance analysis that takes into account economic considerations. The suggestion/motivation for doing is to eliminate many of the impediments incurred in the routine business practices of the printing industry.

Freedman discloses that the overall printing process is only as efficient as its weakest link—the client/printing company interface regarding the printing requirements, costs, scheduling, etc. Freedman further discloses enormous amounts of information have to be exchanged between a prospective customer and a printing facility before an order can be initiated and successfully completed. This often results in numerous time-consuming personal contacts between prospective customers and company personnel; inaccurate transmission of information regarding costs, job requirements, etc.; chaotic work scheduling practices; and numerous difficulties in modifying or redirecting previously arranged job orders. In addition, it is difficult for a customer to know if the price for the printing job was fair since each printing facility had its own distinct pricing structure, making comparison between printing facilities difficult. Freedman further discloses the need to provide a systematic approach to alleviate and/or eliminate these difficulties to permit a customer to quickly relate specific printing needs to a printing

Art Unit: 2625

facility through a computer interface. Therefore, it would have been obvious to combine Freedman's Job Cost Analysis with Nishikawa's Print Processing Method to obtain the invention as specified in order to quickly assess the customer's specific printing requirements with regard to the capacity or capabilities of numerous printing facilities.

Regarding Claim 3: (Previously Presented)

Nishikawa further discloses the method of claim 1 wherein joining the plurality of print jobs into a single joined print job includes joining the plurality of print jobs at the client device (Column 8, lines 59-67); and,

the method further comprising:  
sending the joined print job to an imaging device (Column 7, lines 32-36).

Regarding Claim 4: (Original)

Nishikawa further discloses the method of claim 1 wherein joining the plurality of print jobs into a single joined print job includes:

concatenating the plurality of print jobs (Column 3, lines 24-27); and  
creating a single spool file with multiple raster image processes (RIPs) (Column 21, lines 48-53).

Regarding Claim 5: (Original)

Nishikawa further discloses the method of claim 1 wherein joining the plurality of print jobs into a single joined print job includes:

Art Unit: 2625

generating a RIP for each print job (Column 8, lines 14-18), with RIP end/start instructions (Column 8, lines 22-24);

removing the RIP end/start instructions (Column 8, lines 18-22);

concatenating the plurality of RIPs (Column 8, lines 59-63); and,

creating a single spool file with a single RIP (Column 8, lines 64-67).

Regarding Claim 6: (Original)

Nishikawa further discloses the method of claim 5 wherein generating a RIP for each print job, with RIP end/start instructions, includes generating instructions (Column 8, lines 47-53) selected from the group including universal exit language (UEL), printer reset, @PJL header sequence, and @PJL EOJ.

Regarding Claim 7: (Original)

Nishikawa further discloses the method of claim 1 wherein joining the plurality of print jobs into a single joined print job includes:

converting each print job into an image format file (e.g., PDL; Column 7, lines 29-32); and,

merging the image format files into a single RIP (Column 21, lines 24-27).

Regarding Claim 8: (Original)

Nishikawa further discloses the method of claim 7 wherein converting each print job into an image format file includes converting each print job into an image format file



Art Unit: 2625

selected from the group including TIFF, JPEG, Windows bitmap, and PDF format files (Column 8, lines 16-18).

Regarding Claim 9: (Original)

Nishikawa further discloses the method of claim 1 further comprising: prior to joining the plurality of print jobs, accepts static control selection commands (e.g., Figure 8); and,

wherein joining the plurality of print jobs into a single joined print job includes joining the jobs in response to the selected static controls (See Figures 27 and 30).

Regarding Claim 10: (Original)

Nishikawa further discloses the method of claim 9 wherein accepting static control selection commands includes selecting a control from the group including print job format, print job document type, threshold printing instructions, and printing delay instructions (e.g., Figure 22).

Regarding Claim 11: (Original)

Nishikawa further discloses the method of claim 1 further comprising: accepting dynamic control selection commands;

analyzing dynamic conditions at run-time (Column 22, lines 21-32); and,

wherein joining the plurality of print jobs into a single joined print job includes joining the jobs in response to the dynamic conditions and the selected dynamic

controls (Column 22, lines 33-35).

Regarding Claim 12: (Original)

Nishikawa further discloses the method of claim 11 wherein accepting dynamic control selection commands includes selecting controls from the group including the number of pending print jobs (e.g., Figure 30 shows example of a screen for editing the composed job), a merger performance analysis, inter-RIP conflicts analysis, and post-merger inter-RIP conflict resolution.

Regarding Claim 13: (Original)

Nishikawa further discloses the method of claim 1 wherein joining the plurality of print jobs into a single joined print job includes:

converting each print job into a raster format file specific to an imaging device's rendering engine(e.g., PDL; Column 7, lines 29-32); and,  
merging the raster format files into a single RIP (Column 21, lines 24-27).

3. Regarding Claims 14, and 16-27:

The proposed combination of Nishikawa and Freedman, explained in the rejection of method Claims 1, and 3-13 renders obvious the steps of the system of Claims 14 and 16-27 because these steps occur in the operation of the proposed combination as discussed above. Thus, the arguments similar to that presented above for Claims 1 and 3-13 are equally applicable to Claims 14, and 16-27.

4. Claims 2 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa and Freedman as applied to claims 1 and 14 above, and further in view of Reilly (US 6,502,147).

Regarding Claim 2: (Previously Presented)

Nishikawa and Freedman discloses the method of claim 1 further comprising: receiving the plurality of print jobs at an imaging device (Nishikawa; Column 8, lines 54-58);

Nishikawa and Freedman do not expressly disclose wherein the server computer is located in the printer.

Reilly discloses wherein the print server resides within the printer (Column 1, lines 43-54). Nishikawa, Freedman and Reilly are combinable because they are from the same field of endeavor of image processing; e.g., all references incorporate network printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have included the host computer 3000 of Figure 3 in the printer of Nishikawa and Freedman. The suggestion/motivation for combining the printer and print server is to reduce the cost (Column 2, lines 40-45; Reilly). Therefore, it would have been obvious to combine the network interface of Reilly with the network printing system of Nishikawa and Freedman to obtain the invention as specified in Claim 2.

Art Unit: 2625

Regarding Claim 15: (Previously Presented)

Claim 2 teaches the method. Claim 15 is obvious in view of Nishikawa and Freedman because the system is achieved using the method steps of Claim 2.

### **(10) Response to Argument**

Examiner's Response:

The Examiner's main reference Nishikawa discloses recognizing print settings of a plurality of print jobs, and combining the print jobs together (Column 23, lines 6-10). The Examiner's secondary reference Freedman brings in a method of performance analysis regarding the economic consideration of printing the already joined print job. Freedman evaluates which printing facility and/or particular type of printing equipment is most compatible with the user's specific printing needs such as printing requirements, costs, scheduling etc. (Column 1, lines 10-31).

The Examiner also recognizes that the term 'economic consideration' does not specifically refer singularly to a 'cost saving method' in a dollars and cents fashion, but rather to the feasibility of printing a document/print job given the specific parameters that are to be evaluated.

It is the combination of these two main features that substantially comprise the Examiner's rejection. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a means for performance analysis that takes into account economic considerations. The suggestion/motivation for doing is to

Art Unit: 2625

eliminate many of the impediments incurred in the routine business practices of the printing industry. Freedman discloses that the overall printing process is only as efficient as its weakest link—the client/printing company interface regarding the printing requirements, costs, scheduling, etc. Freedman further discloses enormous amounts of information have to be exchanged between a prospective customer and a printing facility before an order can be initiated and successfully completed. This often results in numerous time-consuming personal contacts between prospective customers and company personnel; inaccurate transmission of information regarding costs, job requirements, etc.; chaotic work scheduling practices; and numerous difficulties in modifying or redirecting previously arranged job orders. In addition, it is difficult for a customer to know if the price for the printing job was fair since each printing facility had its own distinct pricing structure, making comparison between printing facilities difficult. Freedman further discloses the need to provide a systematic approach to alleviate and/or eliminate these difficulties to permit a customer to quickly relate specific printing needs to a printing facility through a computer interface. Therefore, it would have been obvious to combine Freedman's Job Cost Analysis with Nishikawa's Print Processing Method to obtain the invention as specified in order to quickly assess the customer's specific printing requirements with regard to the capacity or capabilities of numerous printing facilities. Thus, by assessing the capacity or capabilities of t Nishikawa's specific printing requirements according to Freedman's Job Cost Analysis, an economically persuasive decisicon regarding the merging taught by Nishikawa is rendered

(a) Regarding Applicant's Argument (page 8, lines 7-9):

“Nishikawa does not disclose a merger analysis to determine the economy of joining print jobs, or rendering the print job at a single imaging device.”

Examiner's Response:

The Examiner respectfully disagrees with respect to Applicant's assertion that Nishikawa does not disclose performing a merger performance analysis and rendering the print job at a single imaging device. Nishikawa at Column 2, lines 64-67, discloses 'analyzing the print setting information of a plurality of print jobs when the composition instruction unit instructs the plurality of print jobs to be combined together so as to obtain one composed job.'

Nishikawa discloses that some of these print settings are number of copies, single side printing, stapling, layout, pages per sheet etc. (Figure 18). The Examiner points out that the Applicant claims these same settings in the Applicant's Specification (page 18, lines 14-23). The Examiner perceives that Nishikawa substantially discloses this particular element.

As to rendering the print job at a single imaging device. Nishikawa discloses in Figure 3, a single imaging device (Printer 1500) and at Column 9, lines 51-52, 'the graphics engine 202 can perform a suitable rendering depending on a designated output destination.'

Art Unit: 2625

(b) Regarding Applicant's Argument (page 9, lines 15-17):

"The claimed invention job joining analysis has nothing to do with the analysis of color, paper type, other printing analysis criteria, or money savings."

Examiner's Response:

The Examiner perceives that the Applicant has chosen features that are disclosed by Nishikawa but not specifically claimed by the applicant. The portion of the text the Examiner cited in the Nishikawa references also includes features that were substantially claimed by the Applicant as addressed in Argument (a).

(c) Regarding Applicant's Argument (page 11, lines 18-19):

"Freedman does not make an analysis of job joining economies, and Freedman certainly makes no kind of analysis concerns prints jobs in a print data language."

Examiner's Response:

The Examiner's main reference Nishikawa discloses these limitations, and are specifically addressed in Claim 1.

**(11) Related Proceeding(s) Appendix**

Art Unit: 2625

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Neil R. McLean/

Examiner, Art Unit 2625

Conferees:

/David K Moore/

Supervisory Patent Examiner, Art Unit 2625

/King Y. Poon/

Supervisory Patent Examiner, Art Unit 2625